

The Gatherer - a mechanism for integration of monitoring data in ATLAS TDAQ

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The ATLAS experiment's data acquisition system is distributed across the nodes of large farms. Online monitoring and data quality runs alongside this system. A mechanism is required that integrates the monitoring data from different nodes and makes it available for shift crews. This integration includes but is not limited to summation or averaging of histograms and summation of trigger rates. A prototype of the central component ('Gatherer') in this mechanism was designed in 2004. Extensive testing in subsequent running in 2008 have led to a substantial reimplementation of the Gatherer. Performance milestones have been achieved which ensure the needs of early datataking will be met. We will present a detailed description of the architectural features and performance of the current Gatherer.

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